

SHATENSHTYN, A.I.; ZVYAGINTSEVA, Ye.N.; YAKOVLEVA, Ye.N.; IZRAILEVICH, Ye.A.;  
VARSHAVSKIY, Ya.M.; LOZHKOVA, M.G.; VZDENEV, A.V.

Acid-base catalysis of the hydrogen isotope exchange reaction. Probl.  
kin. i kat. 9:218-233 '57. (MIRA 11:3)  
(Catalysis) (Hydrogen--Isotopes)

IZRAILEVICH.

SHATINSKII, A.I.; IZRAILEVICH, Ye.A.

Obtaining organic deuterium compounds. Probl. kin. i kat. 9:430-  
(MIRA 11:3)  
1440 '57. (Deuterium)

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SC 100-100-26

AUTHORS: Brodsk, V.L., Izrailevich, Ya.A., Liberman, A.L., Ogorodnikov, M.I., Ponomareva, O.S., Prikhodko, A.F., and Sharovskaya, A.I.

TITLE: On Electron Spectra of Aromatic Hydrocarbons and Their Deuterated Derivatives at 20°K (Ob elektronnykh spektrakh aromaticheskikh uglevodorodov i ikh deuterirovannykh proizvodnykh pri 20°K)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 2, pp 115-122 (USSR)

ABSTRACT: The present paper is the first of a series on the ultraviolet absorption spectra of deuterated compounds and the changes in the molecular and crystal structure produced by deuteration. To obtain the hyperfine structure and to observe the small isotopic shifts measurements were made at 20°K. The work reported here is also an extension of the application of the deuteration methods based on the isotopic exchange of hydrogen with liquid deuterium bromide or with a solution of  $\text{KND}_2$  in liquid  $\text{ND}_3$  (refs 4-10). The results are given in Table 1 which shows that using such methods all types of hydrogen in diphenyl, naphthalene, toluene, n-xylene, m-xylene, p-xylene and hexamethylbenzene may be replaced by deuterium. The preparation followed the method described in Ref 10, which gives the method of

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SCV, 31-3-1-6, 20

On Electron Spectra of Aromatic Hydrocarbons and their Deuterated Derivatives at 20°K

calculation of the number of replaced hydrogen atoms  $n$  in a hydrocarbon molecule. The last column of Table 1 shows that the number  $n$  differs only a little from the total number of hydrogen atoms in the hydrocarbon molecule in question. The following hydrocarbons were deuterated: benzene, toluene, m-xylene, n-xylene, mesitylene, durene, *p,p'*-diphenyl, naphthalene, phenanthrene, diphenyl. The constants, such as the boiling point and refractive index, of the original and deuterated substances are given in Table 2. Using polarized light the authors obtained the electron spectra of the crystals listed in Table 1 (both in deuterated and non-deuterated forms). Measurements were made at 20°K and the results are shown in Figs 1-7. The spectral changes produced by deuteration are due, firstly to changes in the energy changes of molecules, and secondly to changes in the crystal structure. The first produce spectral shifts towards the short wavelengths by ca. 100-200  $\text{cm}^{-1}$  and a decrease of frequencies of the molecular vibrations by a factor of 1.04-1.15. The crystal structure changes show up in the polarization ratios for the absorption bands and in the change of spacing between strongly polarized bands. A.L. Liberman (Institute of Organic Chemistry, Academy of Sciences of the U.S.S.R.) prepared pure benzene and alkylbenzenes. A.I. Shatenshteyn and Ye.A. Izrailevich

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SOV/51-5-2-3/26

On Electron Spectra of Aromatic Hydrocarbons and their Deuterated Derivatives at 20°K

(Physico-Chemical Institute imeni Karpov) prepared deuterated compounds. V.L. Broude, M.I. Onopriyenko, O.S. Pakhomova and A.F. Prikhot'ko (Institute of Physics, Academy of Science of the Ukrainian S.S.R.) obtained and interpreted the electron spectra. The authors thank Yu. Antonchik for density measurements of the deuterated hydrocarbons and P. Manochkina for help in deuteration of the hydrocarbons. There are 7 figures, 2 tables and 16 references, 14 of which are Soviet, 1 American and 1 English.

ASSOCIATION: Institut fiziki AN UkrSSR; Fiziko-khimicheskiy institut im. Karpova (Institute of Physics, Academy of Sciences of the Ukrainian S.S.R.; Physico-Chemical Institute imeni Karpov)

SUBMITTED: July 16, 1957

Card 3/3      1. Hydrocarbons-d--Spectrographic analysis    2. Ultraviolet spectrum  
                  --Applications

AUTHORS: Shatenshteyn, A. I., Izrailevich, Ye. A. SOV/79-28-11-8/55

TITLE: On the Protonic Mobility of the Hydrogen Atoms in Aromatic Hydrocarbons With Aliphatic Substituents (O protonnoy podvizhnosti atomov vodoroda v aromaticeskikh uglevodorodakh s alifaticheskimi zamestitelyami)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 2939-2943 (USSR)

ABSTRACT: Owing to the protonic mobility the hydrogen atoms are capable of being substituted by deuterium or tritium on the action of bases enriched with these isotopes, as well as by alkali metal, and of taking part in various organic reactions (condensations etc.). The degree of mobility of the hydrogen atoms does not only depend on the structure of the compound but also on the question with which other compound and under which conditions the reaction takes place. For this reason various methods were devised for the determination of the mobility of the hydrogen of different sensitivity. The substitution by metal belongs to the most sensitive ones, this substitution, however, changes in the case of the alkali metal the reactivity of the compound in such a degree that

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On the Protonic Mobility of the Hydrogen Atoms in  
Aromatic Hydrocarbons With Aliphatic Substituents

SOV/79-28-11-8/55

the subsequent metallization meets with difficulties even in the case where C-H bonds of equal valence are present in the initial product. The difference and the advantage of the isotopic reaction are represented by the fact that in it all hydrogen atoms that are mobile according to the conditions of the experiment take part in it. The sensitivity of the substitution reactions is sufficiently high in the case of a high protophilic behaviour of the reagent. For this reason, the authors employ the isotopic method for the classification of the protonic mobility of the hydrogen atoms in aromatic compounds with aliphatic substituents by using solutions of potassium amide in liquid deutero-ammonia for the deuteration (Refs 1-5). The experiments described in the experimental part show that in aromatic hydrocarbons with aliphatic substituents (alkyl benzenes, phenylated alkanes etc.) the hydrogen atoms of the aromatic nucleus and the atoms connected with the  $\alpha$ -carbon atom of the substituent (in the catalysis with potassium amide in liquid ammonia) are substituted by deuterium. The combined hydrogen atoms connected with the  $\beta$ -carbon of the substituent are considerably less mobile

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75-1-22/32

AUTHORS: Shatenshteyn, A. I. , Peregudov, G. V. , Izrailevich, Ye. A. ,  
Kalinachenko, V. R.

TITLE: Preparation of Some Deuterated Aromatic Hydrocarbons and Their  
Raman Spectra (Poluchenije nekotorykh deyterirovannykh aromatiches-  
kikh uglevodorodov i ikh spektry kombinatsionnogo rasseyaniya)

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 1, pp.146-151 (USSR)

ABSTRACT: Some known preparations, as well as some ones of deuterated aromatic hydrocarbons still not being mentioned in literature were obtained, and their Raman spectra were measured by means of isotope exchange of hydrogen with  $HD_3$  +  $KND_2$  or with liquid DBr. A comparison between the Raman spectra of hexadeuterobenzene- and octadeuteronaphthalene preparations and those from the references 11, 12, 14 and 15 proves the identity of all preparations and fully confirms the approbation of the new methods of preparation of deuterated hydrocarbons. The advantages of these new methods in relation to those of other authors are enumerated: rapid reaction, the solvent is easily to be removed, possibility of a complete deuteration of various aromatic-, aliphatic-aromatic- and ethylene-hydrocarbons, as well as many other organic compounds. The advantage on occasion of the deuteration by means of liquid DBr in relation

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76-1-22/32

Preparation of Some Deuterated Aromatic Hydrocarbons and Their Raman Spectra

to that one by means of liquid ND<sub>3</sub> is the higher coefficient of the deuteration distribution between the Cu- and NBr bonds ( $\alpha = 3,0$ ) in comparison to  $\alpha = 0,9$  in CH- and NH bonds (see reference 18 and 21). In the presence of an equal quantity of heavy water, 25 times more of DBr than of ND<sub>3</sub> is obtained, besides. The pure benzene.. and toluene preparations placed at the disposal by A. L. Libernab served as initial substances. The liquid ND<sub>3</sub> was prepared by the action of D<sub>2</sub>O (99,6 atm.% D) upon Mg<sub>3</sub>N<sub>2</sub> (reference 2), whilst the liquid DBr was produced synthetically from the elements (reference 24). The technique of the experiment has been described in these references. Presently, the representation of the deuterio-ammonia is simplified: Mg<sub>3</sub>N<sub>2</sub> and an ampule with heavy water are put into a steel balloon. A valve is screwed in into the latter one. By means of destroying the ampule the reaction between Mg<sub>3</sub>N<sub>2</sub> and D<sub>2</sub>O is liberated. On occasion of the hydrogen exchange the substances exist in the solution. As a rule the potassium amide concentration is not great (0,02 N). The exchange reaction was carried out once more with new solvent portions at room temperature during a period, which guarantees the obtaining of the equilibrium in the exchange reaction. On occasion of the experiments with C<sub>10</sub>H<sub>8</sub> the number of the ND<sub>3</sub> mols amounted to 50-150 per mol of substance, whilst on occasion of the experiment with benzene

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and toluene per mol of substance only 20-40 mol of the solvent was taken, because those hydrocarbons (especially benzene) on occasion of distilling after the experiment are easily entrained by ammonia. In order to obtain preparations by means of isotope exchange with liquid DBr 1 g of the substance was dissolved in 15 - 22 g of liquid DBr. After evaporation of the solvent the liquid substances were distilled (above CuSO<sub>4</sub>, in order to remove the ND<sub>3</sub> traces, or above Na, in order to bind DBr). Solid substances were distilled 2 - 3 times.

The spectra of the combined scattering (Raman spectra) were measured by means of a two-prism-spectrograph "Huet" with relative aperture 1 : 4,7 and a dispersion of 100 cm<sup>-1</sup> in the range of 4358 Å. In the following work the computations, and the interpretation of the spectra are given, and the values of the frequencies are precisely. The Raman spectra of following substances were measured: C<sub>6</sub>D<sub>6</sub>, C<sub>10</sub>D<sub>8</sub>, C<sub>12</sub>D<sub>10</sub>, C<sub>6</sub>D<sub>5</sub>CD<sub>3</sub>, 1,4,5,6-C<sub>10</sub>D<sub>4</sub>H<sub>4</sub>, 2,3,6,7-C<sub>10</sub>D<sub>4</sub>H<sub>4</sub>, 2,4,6,2',4',6'-C<sub>12</sub>D<sub>6</sub>H<sub>4</sub> and 3,5,5',5'-C<sub>12</sub>D<sub>4</sub>H<sub>6</sub>.

Card 3/4 The authors were advised by G. S. Landsberg, Academician, and Professor P. A. Bazhulin. P. N. Manochkina assisted. The density of

5(4)

AUTHORS:

Shatenshteyn, A. I., and  
Izrailevich, Ye. A.

307/76-32-12-9/32

TITLE:

A Comparison Between Deuterium Exchange and the Metal  
Substitution in Alkyl Benzenes (Sравнение дейтерообмена и  
металлирования алкилбензолов)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 12, pp 2711-2716  
(USSR)

ABSTRACT:

Toluene, ethyl benzene, isopropyl benzene, tertiary butyl benzene, and n-butyl benzene were treated with deuterium bromide at 0°, 10°, and 25°C in the presence of potassium amide. The deuterium substitution in the alkyl group was calculated from  $n_a = n - n_k$  ( $n_a$  = deuterium in the alkyl group;  $n$  = aggregated deuterium content, determined in the combustion product;  $n_k$  = deuterium in the ring, determined after oxidation into benzoic acid and combustion). The hydrogen atoms in the ring are harder to substitute than the alkyl group hydrogen atoms. Shorygin (Ref 11) discovered the metal substitution by means of organic alkali compounds. A. A. Morton (Ref 13) confirmed the difference in the reactivity of hydrogen in the sequence  $\text{CH}_3 > \text{CH}_2 > \text{CH}$ .

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A Comparison Between Deuterium Exchange and the  
Metal Substitution in Alkyl Benzenes

307/76-32-12-9/32

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moskva  
(Physico-Chemical Institute imeni L. Ya. Karpova, Moscow)

SUBMITTED: July 25, 1957

Card 3/3

AUTHORS:

Yurygina, Ye. N., Alikhanov, P. P.,  
Izrailevich, Ye. A., Manochkina, P. N.,  
Shatenshteyn, A. I. (Moscow)

8/076/60/034/03/015/038  
B115/B016

TITLE:

The Kinetics of Deuterium Exchange of the Isomers of Monodeutero-toluene, Monodeutero-diphenyl, and Monodeutero-naphthalene With Liquid Hydrogen Bromide and a Solution of Potassium Amide in Liquid Ammonia

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, pp 587 - 593

TEXT: The aim of the investigation under review was the determination of the factors of the partial rate  $f$  in the hydrogen isotopic exchange of the substances mentioned in the title with the reagents likewise mentioned in the subtitle. The synthesis of monodeuterated hydrocarbons, the deuterium concentration in water on combustion of the hydrocarbons, and the carrying out of experiments are described. The rate constant of the deuterium exchange is calculated by an equation and, when using ammoniacal solutions, by a simplified form of this equation. The results of the measurements made with liquid HBr are given in table 1, those of the experiments with ammoniacal solutions in table 2, and the mean values of the constants of the deuterium exchange rate

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The Kinetics of Deuterium Exchange on the Isomers of  
Monodeutero-toluene, Monodeutero-diphenyl, and Mono-  
deutero-naphthalene With Liquid Hydrogen Bromide and a  
Solution of Potassium Amide in Liquid Ammonia

S/076/60/034/03/015/038  
B115/B016

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Institute of  
Physical Chemistry imeni L. Ya. Karpov)

SUBMITTED: June 13, 1958

Card 3/3

EXCERPTA MEDICA Sec.4 Vol.11/4 Med.Microb. etc. April 58

897. BACTERIOLOGICAL DIAGNOSIS OF EARLY STAGES AND BLURRED  
FORMS OF PERTUSSIS (Russian text) - Izrailevich E. Y. -

NAUCH. TRUD. MOSK. INST. VAKT. SYVOR. 1956, 6 (261-264)

The author used the posterior pharyngeal wall tampon method (advocated by him earlier as giving rather better results than the cough plate method) to check the value of bacteriological diagnosis of pertussis in the early catarrhal stage, and also for detection of atypical, blurred forms of pertussis. The experiments showed that the pertussis organism was successfully grown in 77% (48 of 59 children) of patients examined in the catarrhal stage. In 38 patients the bacteria were detected 1-15 days before the onset of whooping cough. The method also proved useful for the diagnosis of blurred forms of pertussis in children's homes and schools where there was not a single clinically obvious case of the disease. (S)

IZRAILEVSKIY, M. [Izrailev'skiy, M.], inzh.

Fruit storehouses for collective and state farms. Sil'. bud. 12  
no.10:11-12 0 '62. (MIRA 15:10)

(Fruit—Storage)

VATNBURGER, Isaak Matveyevich; VASENIN, Alekseyandrov Yermolayevich;  
IZRAILIT, Lev Abramovich; KRETSKIY, Dmitriy Borisovich;  
SPORIUS, Eduard Alekseyevich; TIKHONOV, Vasiliy Fedorovich;  
FAYNSHTEYN, Vladimir Maksovich; LAMM, I.A., otv. red.;  
SAKHAROV, Ye.D., red.

[Mechanization and automation of mail processing operations]  
Mekhanizatsiya i avtomatizatsiya obrabotki pochty; informa-  
tsionnyi sbornik. Moskva, Izd-vo "Sviaz", 1964. 77 p.  
(NIKA 17:6)

BOGDZIUK, G.O.; STEPANOV, G.N.; DRIATSKIY, N.M.; IONTOV, L.Ye.; KOVALEV, S.M.; BLOKHIN, A.S.; DVORTSOV, L.D.; LUGOVSKOI, N.Ye.; MERKULOV, A.G.; SMIRNOV, B.P.; ROGINSKIY, E.M.; BALAK-IL'YEVSKAYA, I.A.; IZRAILIT, S.G.; GRANAT, M.B.; ZARIN, S.A., otd.red.; FEDOROVSKAYA, L.N., red.; MARKOCH, K.G., tekhn.red.

[Multichannel apparatus for high-voltage telephony on overhead lines and cables] Mnogokanal'naia apparatura vysokochastotnogo telefonirovaniia po vozдушным i kabel'nym linijam sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 511 p.  
(MIRA 14:1)

(Telephone--Equipment and supplies)

8/08/61/000/011/014/010  
B105/B203

AUTHORS: Aref'yeva, N. V., Diykov, U. V., Izrailov, K. S., Kirenkov, I. I., Shemetillo, N. V.

TITLE: Measurement of the thermodynamic equilibrium temperature between solid and liquid zinc, as well as solid and liquid gold

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 11. 1961. 164, abstract 11E25 (Tr. in-tov Kom-ta standartov. mer i izmerit. priborov pri Sov. Min. SSSR. 1960. vyp. 49 (109). 13-23)

TEXT: The authors describe a new gas thermometer of improved precision. They give results of measurements of thermodynamic equilibrium temperatures between liquid and solid Au, and between liquid and solid Zn, and study the instrumental errors with which the parameters of the thermometer had been determined. The improved design of the manometer and the use of new units increased the precision of pressure measurements. [Abstracter's note: Complete translation.]

Card 1/1

S/115/61/000/001/003/007  
B129/B201

AUTHORS: Gordov, A. H., Izrailov, K. S., Kandyba, V. V., Kirenkov, I. I., Kovalevskiy, V. A., Lapina, E. A., Finkel'shteyn, V. Ye., and Ergardt, N. N.

TITLE: Comprehensive metrological studies for developing methods and apparatus for exact measurements of high temperatures

PERIODICAL: Izmeritel'naya tekhnika, no. 1, 1961, 22-25

TEXT: The ever-increasing demands made by industry on the accuracy and range of measurements of high temperatures make it necessary to reorganize the entire metrological system in the field of measurements of high temperatures and the development of new standard and model devices on the basis of the latest achievements in the construction of precision instruments. In this connection, the VNIIM imeni D. I. Mendeleyeva and KHGIMIP developed a program for the performance of comprehensive metrological studies for the establishment of new standards and high-precision master instruments for temperatures of up to 10,000°C. This metrological research work was completed in 1960. The studies were made in four fundamental directions: thermometry

Card 1/2

S/53/62/006/005/001/119  
A160/A101

AUTHOR: Izrailov, K. S.

TITLE: An instrument for the capacitive fixation of the mercury-level height in a gas-filled thermometer

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 11, abstract 5A129  
("Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov. Min. SSSR", 1961, no. 51 (III), 12-22)

TEXT: A description is given of the principle of determining the mercury-level in a gage by the electric capacitance. The design of gage heads functioning as capacitance pressure transducers is presented. Investigated are the parameters of the transducer and the effect of various factors on its operation. The use of the capacitive method and of the corresponding measuring units in the gage of the new precision gas-filled thermometer of the VNIIM permitted to secure mercury-level readings with an error of  $\pm 1\mu\text{Hg}$ .

[Abstracter's note: Complete translation]

Card 1/1

Temperatures of termodynamic equilibrium between...

S/263/62,000/011/013/022  
1007/1207



on the mercury, thus permitting the pressure of both gases to be equalized. Displacement of the diaphragm is controlled by the capacity method through an a.c. bridge, with an error not exceeding 1 micr. Hg. The mercury pressure-gage provided with capacitive blocking of the mercury level, ensures a measuring accuracy of  $\pm 3$  micr. Hg. Methods of melting of zinc are described with maximum impurities of 0.0003 % and of determining the thermodynamic freezing point of gold having an impurity limit below 0.0001 %. Measurement results are given and the total measuring error is computed. On the strength of these results the temperature of  $419.57 \pm 0.2^\circ\text{C}$  was found to be the most probable temperature of the rmodynamic equilibrium between solid and liquid gold while  $1064.5 \pm 2^\circ\text{C}$  seems to be the most the probable freezing point of silver. There are 5 figures and 8 references.

[Abstracter's note: Complete translation.]

Card 2/2

KIRENKOV, I.I.; GORDOV, A.N.; IZRAILOV, K.S.; DIYKOV, U.V.

New measurements of thermodynamic temperatures of reference  
points of tin, cadmium, zinc and gold. Izm.tekh. no.9:31-35  
(MIRA 15:11)  
S '62. (Thermometry)

42677

9.4172

S/589/62/000/063/013/021  
E194/E135

AUTHOR: Izrailov, K.S.

TITLE: A separating chamber for gas thermometers with optical interference reading of zero

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. no. 63(123). Moscow, 1962. Issledovaniya v oblasti teplovых и temperaturnykh izmereniy. 168-181.

TEXT: When using a gas thermometer there are many advantages in separating the gas in the thermometer bulb from that in the manometer. This article describes the operating principles, construction and main properties of such a device for this purpose in which the absence of pressure difference across a flexible diaphragm which forms the separating barrier is recognised to within better than 1 micron of mercury by an optical interference method. The diaphragm is made of polished phosphor bronze, 74-76 mm diameter, 26-28 microns thick. It is sealed round the edge to a nickel-plated and polished copper backing plate which, for an area of a diameter of 76 mm, is hollowed to a depth of  
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A separating chamber for gas ...

S/589/62/000/063/015/021  
E194/E135

0.08 mm in the shape of a spherical surface with a 6 m curvature radius. The diaphragm can be deflected thus far without damage. The upper cover of the diaphragm, similarly hollowed, is made of optical glass; the overall cover is made of copper. The space below the diaphragm, which has a volume of 0.2 ml, is connected to the gas thermometer by a steel capillary of 0.5 mm diameter. The space above the diaphragm is connected to the manometer by a similar capillary. The complete device, together with a special optical system, is mounted on the stage of a microscope with a magnification of X 100 over a field (on the diaphragm) of about 1.2 mm diameter. The optical system passes part of a light beam to the diaphragm from which it is reflected back to the microscope and another part of the beam is reflected from another mirror, the whole being arranged to give a double interference pattern in the microscope. The pattern changes when the diaphragm is displaced. A typical diaphragm was displaced 0.25 microns per micron mercury pressure difference across it; the diaphragm zero setting was reproducible to better than  $\pm$  0.5 microns mercury; the device is sensitive to within 0.2 microns mercury; the stability is

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42678

S/589/62/000/063/016/021  
E194/E436

9.4.72

AUTHOR: Izrailov, K.S.

TITLE: An isolating chamber with capacitive reading

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. no.63(123). Moscow, 1962. Issledovaniya v oblasti teplovykh i temperaturnykh izmereniy. 182-199

TEXT: When using a gas thermometer it is often necessary to isolate the gas in the thermometer from the manometer. In this way contact between the thermometer gas and the mercury vapour is avoided, dead space in the thermometer is cut down and the manometer can be located at a convenient place away from the gas thermometer. Two types of chamber were developed, an interference chamber described elsewhere and a chamber with capacitive method of confirming zero pressure difference which is described here. The isolating chamber is a zero differential manometer, in which the thermometer gas is separated by a special diaphragm from the gas in the mercury manometer. Flexing of the diaphragm is converted into an electrical signal by means of an electric

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~ 50-0-50 microammeter

An isolating chamber ...

S/589/62/000/063/016/021  
E194/E436

type M-24. The indicator, its amplifier and other auxiliary equipment are located in a separate unit. The bridge circuit is capable of measuring diaphragm displacements less than  $0.01 \mu$  and the diaphragm sensitivity is about  $0.04 \mu$  displacement per micron mercury, and displacements up to  $100 \mu$  are directly proportional to the pressure. The clearance of  $80 \mu$  between the diaphragm and guard surface is thus very suitable. The stability of the chamber's properties was particularly studied and found satisfactory in respect of barometric pressure, time and temperature, the total temperature error being of the order of  $\pm 3 \mu$  of mercury per degree and, since the equipment is thermostatted at  $20 \pm 0.1^\circ\text{C}$ , this is negligible. The equipment has operated stably and reliably for over two years. Pressure differences in the chamber of 0.1 microns of mercury can be detected reliably. A new design of electrode is now being tested in which the rim is made of glass to facilitate observation of deflection of the disc during calibration. In determinations of thermodynamic temperature with a gas thermometer the overall error of balancing the pressure in the short arm of the mercury manometer does not exceed  $\pm 1 \mu$  of mercury. The use of this  
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An isolating chamber ...

S/589/62/000/063/016/021  
E194/E436

device has greatly facilitated not only gas thermometer measurements but also such matters as checking the sealing of the thermometer system and the passage of gas through the capillary tubes to the thermometer bulb, setting up the initial pressure in the bulb and so on. The isolating chamber being a sensitive micromanometer should also find other applications. There are 15 figures.

ASSOCIATION: VNIIM

SUBMITTED: January 14, 1961

Card 4/4

ASAF'Yeva, N.V.; DLYKOV, L.V.; DOBROKHOTOV, A.G.; LITVINOV, L.V.; NIKONOV, I.I.; NIKITENKO, L.V.; SVERETILOV, N.V.

New measurements of thermodynamic temperature with a gas thermometer.  
Trudy inst.Kom.stand.mer i izm.prib. no.71:14-29 '63.

(MIM 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im.  
D.I. Mendeleyeva.

LENINOV, A. V.

How to obtain a high perennial grass yield. (Smolensk) Smolenskoe obl. Gos. izd-vo, 1951. 55 p.

DA

1. Seeds. 2. Grasses - Russia - Smolenskaya oblast'.

1. IZRAILOVICH, N. YE. Eng.
2. USSR (600)
4. Building
7. Application of efficient methods in the erection of industrial buildings.  
Bul. stroi. tekhn. 9 no. 20, 1952
9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

SHATSKIY, Ye.Z., kandidat tekhnicheskikh nauk; IKRAYLOVICH, N.Ye., inzhener.

Industrial enterprises of the Construction Trust for the Development of the  
Gor'kiy Automobile Plant. Biul.stroi.tekh. 10 no.15:8-12 0 '53.

(MLRA 6:10)

1. TAIINS. (Gor'kiy--Reinforced concrete construction)  
(Reinforced concrete construction--Gor'kiy)

IZRAYLOVICH, N.Ye., inzhener, redakteur; UDOD, V.Ya., redakteur; VOLKOV, V.S., tekhnicheskiy redakteur.

[Experiment in constructing dwellings of large building blocks]  
Opyt streitel'stva zhilykh domov iz krupnykh blokov. Moskva,  
Gos.izd-vo lit-ry po streitel'stvu i arkhitekture, 1955. 46 p.

(MLRA 9:4)

1. Mscow. TSentral'nyy institut informatsii po streitel'stvu.  
(Building)

IZRAILEVICH, N. E.

Using reed for building purposes. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 42 p.

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619410012-7

RECORDED AND READABLE REPORTS OF INTELLIGENCE POLICY  
COUNCILS ARE IN GENERAL BETTER THAN THE PAPERWORK REPORTS OF

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619410012-7"

IZRAILOVICH, N.Ye., inzhener, nauchnyy redaktor; UDOD, V.Ya., redaktor  
izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[The practice of using precast reinforced concrete construction  
elements in rural building] Iz praktiki primeneniia sbornykh  
zhelezobetonnykh konstruktsii v sel'skom stroitel'stve. Moskva,  
Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 39 p. (MLRA 9:8)

1. Moscow. TSentral'nyy institut informatsii po stroitel'stvu.  
(Precast concrete construction)  
(Farm buildings)

~~IZRAILLOVICH, N.Ya.~~ inzhener, nauchnyy redaktor; KOTIK, B.A., redaktor  
izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Annotated list of research works on building and architecture;  
work carried out during 1956] Sbornik annotatnii nauchno-issledo-  
vatel'skikh rabot po stroitel'stvu i arkhitekture; raboty, vypolnen-  
nye v 1956 g. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit.,  
1957. 466 p.

(MLRA 10:9)

1. Akademiya stroitel'stva i arkhitektury SSSR. TSentral'nyy  
institut nauchnoy informatsii po stroitel'stvu i arkhitekture  
(Bibliography--Building) (Bibliography--Architecture)

IZRAILLOVICH, N.Ye. nauchnyy red.; KHLUDEYEVA, Ye.I., red. izd-va.; MEDVEDEV, L.Ya., tekhn. red.; GILENSEN, P.G., tekhn. red.

[Collection of abstracts of research work in building and architecture; works completed in 1957] Sbornik annotatsii nauchno-issledovatel'skikh rabot po stroitel'stvu i arkhitektury; raboty, vypolnennyye v 1957 g. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 651 p. (MIRA 11:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Tsentral'nyy institut nauchnoy informatsii po stroitel'stvu i arkhitekture.  
(Building research)

IZRAILOVICH, S.D.

Work practice of the council of assistance. Sov.zdrav. 15 no.4:  
36-41 Jl-Ag '56. (MLRA 9:9)

1. Iz gorodskoy klinicheskoy bol'nitsy No.18 imeni Oktyabr'skoy  
Revolyutsii Krasnogvardeyskogo rayona Moskvy (glavnnyy vrach  
M.I.Kamnev)  
(PUBLIC HEALTH,  
in Russia, organiz. (Bue))

VECHTOMOV, M.I., inzh.; KUDRYAVTSEV, V.A., inzh.; BALKES, D.A., inzh.; OSTROVSKIY, G.I.; POVERENNYY, L.D.; SUSHKOV, P.M., inzh.; TYULENEV, N.Z., inzh. Prinimali uchastiye: GALYANOVA, N.S., inzh.; PUTEYEVA, N.P.; IZRAYLOVICH, Ye.A., inzh.; MARCHENKO, G.A., inzh.; MALYGINA, Z.S.; SOKOLOVA, Ye.A.; SOKOV, V.N., inzh.; TARASOVA, S.N.; TASHAYEV, A.L., inzh.; FILIMONOV, S.V.; DVALICH, K.F., inzh., nauch. red.; NOVITCHENKO, K.M., inzh., nauchnyy red.; SIMAKOV, S.N., inzh., nauchnyy red.; FAKTOROVICH, Yu.A., kand. tekhn. nauk, nauchnyy red.; STUPIN, Ye.N., otv. red.; LUTOV, N.S., red.; IVANOV, V.S., red.; BAGUZOV, N.P., glav. red.; VOLCHEGORSKIY, M.S., zam. glav. red.; DOBRYNIN, S.N., red.; NAZAROV, I.A., red.; KOLESNIKOV, S.I., red.; MEL'NIKOV, N.P., red.; SUSNIKOV, A.A., red.; STAROVEROV, I.G., red.; LYTKINA, L.S., red. izd-va; GODEYEV, P.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Handbook for the designer of industrial, residential, and public buildings and structures; organization of construction and execution of building and assembly operations. Industrial construction] Spravochnik proektirovshchika promyshlennyykh, zhilykh i obshchestvennykh zdanii i sooruzhenii; organizatsiia stroitel'stva i proizvodstvo stroitel'no-montazhnykh rabot. Promyshlennoe stroitel'stvo. Pod red. P.M. Sushkova. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 372 p.

(MIRA 15:2)

(Industrial buildings)

IZRAIL'SKAYA, M. A.

25975. Izrail'skaya, M. A. K patomorfologii travmaticheskogo shoka. zdrevookhran-  
eniye Kazakhstana, 1949, No 4, s. 13-16

SO: Knizhnaya Letopis', Vol. 1, 1955

DERGACHEV, I.S.; IZRAILL'SKAYA, M.A.

Pathomorphology and pathogenesis of tuberculous meningo-encephalitis  
treated with streptomycin. Pediatrilia, Monkva no.5:6-12 Sept-Oct 1953.  
(CJML 25:5)

1. Professor for Dergachev; Candidate Medical Sciences for Izrail'skaya.
2. Of the Pathoanatomic Division of the Institute of Pediatrics (Di-  
rector -- Prof. M. N. Kazantseva), Academy of Medical Sciences USSR.

*Izrail'skaya* Vol. 14/2 Pathology Rep. 58

580. PATHOMORPHOLOGY OF THE CNS IN CHILDREN WITH RHEUMATISM  
(Russian text) - Izrailskaya M. A. - VOP. OKHR. MATER. DET. 1956.  
1/5 (46-54)

The CNS of 20 children who had suffered from rheumatism was investigated. Pathological findings fell into 3 categories: in the first group of 11 children with the cardio-articular form and cardiac failure, pathological examination revealed congestive encephalopathy and changes caused by insufficient and deranged blood circulation, and also changes in cerebral vessels as a result of hypoxia of nerve cells and glia. In the second group of 4 children there were signs of exudative meningo-encephalitis. In the 3rd group of 5 children there were signs of productive encephalitis with knot-like formations in various parts of CNS, however, without the features of Aschoff's nodules. In all groups there were signs of changes in the smaller cerebral vessels in form of focal or diffuse sclerosis and dystrophic changes in the nerve cells. Involvement of the sympathetic nervous system in rheumatism was reflected by pathological changes in the mid-brain. Many of the changes were probably reversible in life.

(S)

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**APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619410012-7"**

IZRAIL'SKAYA, M.A. (Moskva)

Changes in the central nervous system in rheumatic fever in children.  
Arkh.pat.18 no.4:99-104 '56 (MIRA 11:10)

1. Iz patologoanatomicheskoy laboratorii (zav. - prof. I.S. Degrachev)  
Instituta pediatrii AMN SSSR.

(RHEUMATISM, in inf. and child  
brain pathol. (Rus))  
(BRAIN, pathol.  
in rheum. in child. (Rus))

USOL'TSEV, A. N., kand. med. nauk; PERMIL'SKAYA, N. A., kand. med. nauk

Rheumatic pneumonias in children. Pediatriia no. 8: 21-27 '61.

1. Iz otdeleniya patologii starshego detskogo vozrasta (zav. -  
deystvitel'nyy chlen AMN SSSR prof. O. D. Sokolova-Ponomareva)  
i patomorfologicheskoy laboratorii (zav. - prof. I. S. Dergachev)  
Instituta pediatrii AMN SSSR (dir. - prof. O. D. Sokolova-Ponomareva).

(RHEUMATIC FEVER) (PNEUMONIA)

OSKOLKOVA, M.K.; IZRAIL'SKAYA, M.A.

Problem of the diagnosis of heart tumors. Vop. okhr. mat. 1  
(MIRA 15:7)  
det. 6 no.6:71-75 Je '61.

1. Iz revmatologicheskoy kliniki (zav. - chlen-korrespondent  
AMN SSSR prof. O.D. Sokolova-Ponomareva) Institut pediatrii  
AMN SSSR i patomorfologicheskoy laboratorii (zav. - prof. I.S.  
Dergachev) Instituta pediatrii AMN SSSR.  
(HEART-TUMORS)

USOL'TSEV, A.N., kand. med. nauk; IZRAIL'SKAYA, M.A., kand. med. nauk

Clinical and anatomical characteristics of changes in the  
lungs of children with leukemia. *Pediatria* 41 no.10:43-50  
(MIRA 17:2)  
O '62.

1. Iz otdeleniya patologii starshego detskogo vozrasta  
(rukoveditel' - deystvitel'nyy chlen AMN SSSR prof. O.D.  
Sokolova-Ponomareva) i patomorfologicheskoy laboratorii  
(rukoveditel' - prof. I.S. Dergachev) Instituta pediatrii  
(dir. - dotsent M.Ya. Studenikin) AMN SSSR.

TOPARSKAYA, V.N., IZRAIL'SKAYA, N.M., MOSKVICH, N.G.

Effect of a fatty diet on the course of diabetes mellitus. Sov.  
med. 22 no.7:29-34 Jl '58 (MIRA 11:10)

1. Iz endokrinologicheskogo otdeleniya (zav. - prof. M.S. Vovsi  
Moskovskiy gorodskoy ordena Lenina klinicheskoy bol'nitay imeni  
S.P. Botkina i kafedry laboratornoy diagnostiki (zav. prof. Ye.A. Kost).  
Tsentral'nogo instituta usovershenstvovaniya yaruchey.

(DIABETES MELLITUS, ther.  
diet, high fat (Rus))

(DIETS, in various dis.  
high-fat diet in diabetes mellitus (Rus))

KOST, Ye.A.; BOKUNYAYEVA, N.I.; IZRAIL'SKAYA, N.M.

"Handbook on laboratory methods of investigation" by G.N.Udintsev,  
V.B.Blan~~k~~, I.S.Timeskov. Reviewed by E.A.Kost, N.I.Bokuniaeva,  
N.M.Izrail'skaia. Lab. delo 7 no.3:62-63 Mr '61. (MIRA 14:3)  
(MEDICAL LABORATORIES—HANDBOOKS, MANUALS, ETC.)  
(UDINTSEV, G.N.) (BLANK) V.B. (TIMESKOV, I.S.)

RUSTAMBEKOV, A.F.; BABAYEV, N.B.; IZBAIL'SKIY, A.M.; FINKEL'SHTEYN, G.M.

Reducing the consumption of casings. Azerb.neft.khoz.35 no.7:8-10  
J1 '56.  
(Oil well drilling--Equipment and supplies)

LIBELOVICH, M. Ya.

Building materials - Transportation

Equipment for transporting building materials.  
Biul. stroi. tekhn., 9, no. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, October 1952, Uncl.

IZRAIL'SKIY, M.Ya., inzhener.

Marking reinforced concrete products. Stroi.prom.32 no.11:47  
N 154. (MLRA 7:11)  
(Precast concrete construction)

PERALSKY V. P.,

"The Problem of Acquired Immunity in Plants," Priroda, no. 11, 1934, pp. 25-33. (10 P53)

SO: SIRA SI-19-53, 15 Dec. 1953

IZRAILSKIY V. P.

"Bacteriosis of Wheat," Trudy Vsesoiuznogo Nauchno-Issledovatel'skogo Instituta Zerna i  
Produktov Ego Pererabotki, no. 13, 1934, pp. 39-40. 59.9 E85  
IZRAILSKIY, V. P. and KAMAKOVA, A.

SO: SIRA SI-19-53, 15, Dec. 1953

AM  
ИРАИЛЕК (В. Р.) & ОСИПОВАНОВА (ШАС (И. В.)). Определение некоторых флуоресцирующих фитопатогенных бактерий. [Ре-диагностика некоторых флуоресцирующих фитопатогенных бактерий]. Микробиол. [Microbiol.], vii, 7, pp. 809-828, 3 figs., 1938. [English summary.] [Received May, 1939.]

Several strains of *Bacterium (Pseudomonas) citripedalis* [R.J. M., xv, p. 578] were isolated from branches of lemon and tangerine trees affected by blast [ibid., xvii, p. 812] and studied in comparison with other strains of the same organism from various districts of U.S.S.R. and with other bacteria. Meat peptone agar plus malachite green (1 : 100,000) was found to be a very suitable culture medium because it arrested the growth of spore-bearing and saprophytic bacteria, but allowed the development of fluorescent pathogenic bacteria, almost all of which formed the same characteristic type of colony with a wavy margin and a slightly uneven surface. The majority of the strains of *P. citripedalis* liquified gelatine, peptized and alkalinized milk, and failed to form acids from sugars (excepting a few strains on glucose), while some strains were divergent in their biochemical properties and later proved

to differ also in their serological properties and pathogenicity. The bacteriophage from *Bact. zanthochlorum* [ibid., xvi, p. 339] and that from *P. citripedale* isolated from tangerine dissolved all bacteria belonging to the fluorescent group but no other. Sera of rabbits immunized against *P. citripedale* agglutinated all strains of this bacterium and some of *Bact. tubercum*, while sera immunized against *Bact. tubercum* agglutinated most of the strains of *P. citripedale* and some of *Bact. tubercum*. Strains of *P. citripedale* aberrant in their biochemical properties were not agglutinated by sera of either *P. citripedale* or *Bact. mori*. It is assumed from a certain inconsistency in the serological data that some of the fluorescent bacteria contain a mixture of antigens, of which some are specific and others non-specific for the given bacteria. Of the strains of *P. citripedale* only those with the biochemical and serological properties typical for this bacterium proved pathogenic to the branches, leaves, and fruits of lemon, whereas the aberrant strains and also *Bact. mori*, *Bact. tubercum*, and *Bact. zanthochlorum* were not pathogenic.

A M

## 111 AND 112. PLANTS

## PLANT AND PREPARATES MODE

ISRAILSKI (V. P.) & CHIKROKHOVA (Mme G. V.). Cephalotrichione  
neocaricaeum puerariae, nopyanicheskikh vnepravil'nykh bolez-  
niv. [Serological examination of plants affected with bacterial  
diseases.] *Mepistof. (Moshkov.).* vni. 1, pp. 101-110, 1930  
(English summary)

In further studies in Moscow on the possibility of applying serological tests for the diagnosis of bacterial diseases (R.d.M., xviii, p. 445), extracts from the rind of lemon fruits and branches of lemon trees infected with *Bacterium (Pseudomonas) citripedale* gave a precipitate with rabbit sera immunized against this organism, whereas extracts from healthy plant material gave none; none of the extracts gave any precipitate with normal rabbit sera. Similar results were obtained in analogous tests with *Bac. mori*. A few normal sera gave precipitates with extracts from healthy plants, e.g. cotton, possibly owing to the presence of some pseudo-antibodies, and it is, therefore, of importance only to prepare immune sera from rabbits whose normal sera do not react in this way. Extracts from branches of lemon trees naturally infected with *P. citripedale* failed to precipitate, however, with sera immunized against strain 'lemon 25' of this organism, and a biochemical and serological examination of three out of the 15 strains isolated from these branches showed them to differ from strain 'lemon 25' in various

## ASS-11A METALLURGICAL LITERATURE CLASSIFICATION

6-27-372-10127

respects. Similar tests with beans and *Bact. zanthochlorum* (strains 69 and 77) also demonstrated that the precipitation reaction is specific, and takes place only when the sera used are immunized against a strain of bacterium serologically identical with, or closely related to, that present in the infected plant. Extracts from tomato and sunflower galla caused by *Bact. tumefaciens* gave very small precipitates with sera immunized against the same strain of the organism, and this is held to substantiate the observations of earlier workers that the galla contain only very small numbers of bacteria.

R.

Izotovskii (A. P.) & Arshavskii (Mme Z. N.) Biological properties of the agent (*Bacterium mori*) of Mulberry-tree bacteriosis. *Muzey* 6 no. 1. [Microbiol.], viii, pp. 898-908, 1939. [Russian, with English summary. Abs. in *Chem. Abstr.*, xxxv, 11, p. 3673, 1941.]

The lytic action of the bacteriophage of *Bacterium (Pseudomonas) mori*, the agent of mulberry bacteriosis in the U.S.S.R. [R.I.M., xvi, p. 785], is stated to be non-specific. The bacteriophage exerts a prophylactic effect against mulberry leaf infection by *P. mori* and falls into two groups of strains, acid and alkaline, of which only the former ferment glucose and sucrose. The serological method of diagnosis of infection [ibid., xix, p. 73] in the host gives the most accurate results.

An emulsion of a pure culture of the bacteriophage of *P. mori* or the pulp of diseased mulberry leaves, introduced into garden soil, will lose its activity in about six days.

ScirRes Inst. Microbiology, RSFSR Peptin 1000 g liter. 12

ISRAILSKY, V. P.

"The serological diagnostic--method of the virus and bacterial diseases of plants."  
( p. 66 ) by Israilevsky, V. P.

SO: Advances in Modern Biology Uspekhi Sovremennoi Biologii  
Vol. XI, No. 1, 1939

TERAILAKI (V. P.) & HTRUMINNAYA (MIN E. V.). Serological examination of plants affected with bacteriosis. III. Examination of legumes for *B. medionigra* v. *phaseolicola*, *B. mucronifolium*, *B. phaseoli* v. *fuscans* and others. (Mengolian.) [Mengol. x. 4, pp. 480-487, 1941. (English summary. Also in Biol. Abstr., XVI, 10, pp. 2339-2340, 1942.)]

Extracts of bean (*Phaseolus vulgaris*) plants infected by *Bacterium: Xanthomonas* *medionigra* vnr. *phaseolicola*, *Bact.* [*Corynebacterium*] *fuscans*, or *Bact.* [*X.*] *phaseoli* vnr. *fuscans* gave specific precipitin reactions with sera prepared against the corresponding organism. The best extracts were obtained from finely cut portions of plants kept in water heated to 60° C., clarification being effected by one filtration (preferably not more) through tale. Extracts prepared from healthy seeds yielded non-specific precipitates, which could be eliminated by first treating the extracts with normal serum for two hours at 37° to 40°, followed by a day in the refrigerator, the resultant precipitate being centrifuged off and the clear liquid used for testing. Extracts of infected seeds thus treated gave specific precipitin reactions with the antisera to the species of bacteria causing infection. Dialysis of the seed extracts for 24 hours in a collection bag against running water also removed the non-specific precipitates. The residue of sediment left in the bag was clarified by centrifugation, after which only the appropriate specific reactions were obtained.

1412

ISRAILSKI (Y. P.). Приобретенный иммунитет у Растений. [Acquired immunity in plants]. Успехи современной Биологии. [Achievements of contemporary Biology], xv, 2, pp. 162-180, 1942.

The author presents a detailed critical review of the available knowledge on the problem of acquired immunity in plants (R.A.M., xvii, p. 80), referring in particular to the work of Carbone (ibid., xi, p. 798), Cappelletti (Ann. Bot., Roma, xvii, pp. 1-87, 1928), and Magrou (R.A.M., xvii, p. 799). A bibliography of 80 titles is appended.

P. 11

Izrailevsky (V. P.). Antibiotic substances and bacteria control in animals and plants. — Vsesoyuz. Gosprommed. Izdatelstvo [Advances in modern biology]. Moscow, xix, 3, pp. 358-371, 1945. [Russian.]

The author traces the growth of antibiotic research from Pasteur to the present day, and reviews the work of several investigators of the products of *Penicillium* spp. and their properties, following the discovery of penicillin by Fleming in 1929. A bibliography of 76 titles, twelve by Russian authors, is appended.

ISRAILSKY, V. P.

"Growth promoting substances and their role in bacterial tumor development." (p. 109) by  
V. P. Israilsky.

SO: Advances in Modern Biology (Uspokhi Sovremennoi Biologii) Vol. XXIII, No. 1, 1946

CA

11 D

Growth substances and their importance in the formation of bacterial tumors in plants as well as their effect on phytopathogenic bacteria and fungi. A. P. Luria. *Advances in Modern Biol. (USSR)* 23, 109-201 (1962). Chem. Abstr. 1947, 1, 732 - A review. M. G. Meier

IZRAILEVSKY, V. P.

"Growth Substances and Their Importance in the Development of Bacterial Seedlings in Plants, and Also in Phytopathogenic Bacteria and Fungi." Uspekhi Sovremennoi Biologii, vol. 23, no. 1, 1949, pp. 109-126. 442.8 Er3

SO: SIRA SI-19-53, 15 Dec. 1953

IZRAIL'IN, V. F.

Bakterial'nye bolezni rastenii (Bacterial diseases of plants). Moscow, Sel'khozgiz, 1952.  
314 p.

See: Monthly List of Russian Accessions, Vol 6, No. 3, June 1953

"Influence of the serum of cancer patients on the amoebae of Paramecium caudatum"  
Vrancibarco, 1956, 1956.

to infusoria (*Paramecium caudatum*) obtained after three-times centrifugation of boiled water, was added an equal amount of a 10 percent solution of blood serum. After determination of the time interval in order to establish a standard, we counted the destroyed infusoria. We found that the serum of patients with malignant tumors destroyed the infusoria, while the serum of patients with nonmalignant tumors and the serum of healthy men had a less toxic effect. There must therefore exist a toxic factor in the serum of patients with malignant tumors. (Medical, No. 2, 1954)

SC: Sum. 492, 12 May 56

IZRAIL'SKIY, V.P.

Filtrable forms of nodule bacteria. Mikrobiologiya 32 no.6:645-651  
N-D '53. (MLR 6:12)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo  
instituta sel'skokhozyaystvennoy mikrobiologii.  
(Microorganisms, Nitrogen-fixing)

IZRAIL'SKIY, V.P.

Examination of changes in nodule bacteria grown in filtrates of other bacteria. Mikrobiologija 23 no.1:22-26 Ja-J '54. (MLRA 7:2)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii.  
(Microorganisms, Nitrogen-fixing)

IZRAIL'SKIY, V.P.

"Plant diseases and the external environment." M.V.Gorlenko.  
Reviewed by V.P.Izrail'skiy. Mikrobiologiya 23 no.2:230-234  
Mr-Ap '54. (MLRA 7:4)  
(Plant diseases) (Gorlenko, M.V.)

IZRAIL'SKIY, V.T.

IZRAIL'SKIY, V.P.; BORODULINA, Yu.S.

"Problems in the use of bacterial fertilizers." Mikrobiologiya 23  
no.6:751-755 N-D '54. (MIRA 8:2)  
(BACTERIOLOGY, AGRICULTURAL)  
(FERTILIZERS AND MANURES)

IZRAIL'SKIY, V.P.

"Bacterial diseases in plants." M.V.Gorlenko. Reviewed by  
V.P.Izraill'skii. Mikrobiologiya 24 no.5:638-640 S-0 '55.  
(BOTANY--PATHOLOGY) (MLA 9:1)  
(BACTERIA, PHYTOPATHOGENIC) (GORLENKO, M.V.)

USSR/Plant Diseases - Diseases of Cultivated Plants.

0-3

Abs Jour : Ref Zhur- Biol., No 7, 1958, 30226

Author : Izrail'skily, V.P., Karpovskaya, S.Kh.

Inst : All Union Academy of Agricultural Sciences imini V.I.Lenin

Title : The Internal Infection of Tomato with Bacterial Canker  
as a Communicatory Factor.

Orig Pub : Dokl. VASKhNIL, 1957, No 6, 22-26

Abstract : In order to investigate the role of the internal infection of seeds in the spread of tomato bacterial canker, a study was made with seeds collected from fruits 1) having internal infections, 2) having infected fruit stems, 3) from heavily attacked plants, and 4) from plants having moderately damaged stalks. To detect *Corynebacterium michiganense* (E. Smith) the seed surfaces were disinfected with mercuric chloride (1: 1000 and 1: 3000), the residual bactericide was removed by soaking in sterilized water for 3½ to 4 hours ( $H_2SO_4$  depressed seed germination,

Card 1/3

USSR / Microbiology. Symbiosis

F

Abs Jour : Ref. Zhur biol., No. 21, 1958, No 95071

Author : Izrail'skiy, V. P.

Inst :  
Title : The Investigation of Changes of Nodule-Forming  
Bacteria During Their Growth in Filtrates of  
Other Bacteria and the Effect of This Filtrate  
on Plants.

Orig Pub : Mikrobiologiya, 1957, 26, No.5, 541-543

Abstract : Seeds of lucern and clover, first disinfected  
with sulfuric acid, were soaked during sowing in  
agar mineral mediums without N with filtrates of  
nodule-forming bacteria of lucerne, clover, pea,  
as well as with a filtrate of Bact. tumefaciens.  
Of all the variants, only the filtrates of the  
lucerne bacteria caused the formation of pipe-

Card 1/2

Effect of Antibiotics on Plant Growth / 203

biofilms & rapidly deplete the available antibiotics in the environment.

Yerushalayim: Yeshivat Har Etzion; Ramat Shlomo: Yeshivat Shlomo, 1999. 57: 1, 57: 4-2-13 (Targum).

**ABSTRACT:** A conference dealing with this subject took place in Yerevan

from 6 to 11 October 1956, it had been called by the Institute of Microbiology, the Academy of Sciences of the Soviet Union, and the Institute of Microbiology and the Academy of Sciences of the USSR, the International Institute of Veterinary Microbiology, Tbilisi (All-Union Institute for Agricultural Microbiology of the USSR), and the Soviet Microbiology Academy, back Arsenyevskii (Department for Microbiology of the Academy of Sciences of the Arzamaskaya SSSR).

Kh. Kh. Khachikyan speaks about microbe metabolism which

proposes the development of methods for the prevention of diseases. He also reported to investigations of several years duration carried out by Tbilisi scientists on and focuses the role and its utilization in the fight against agricultural plant diseases.

Kh. Kh. Khachikyan deals with the utilization of

France and elsewhere in fighting the diseases of cotton bolls, potato and cassava other agricultural breeds. B. O. Mireshebenian report deals with the extension of cottonseed oil which produce active antibiotic against the carriers of potato wart disease and diploida in nature. S. G. Gulyam and M. M. Mamedova spoke about the application of the antibiotic seed antibiotics in fighting potato ring rot and cassava borer in subtropical.

G. M. Falt, American reported on the effect of preparations from cottonseed on the resistance to powdery mildew of the cotton bolls. G. G. Gulyam, B. O. Mireshebenian, R. A. Bekturhan, S. M. Mamedova spoke about the application of cottonseed oil against the carriers of potato wart disease and diploida in nature. S. G. Gulyam and M. M. Mamedova spoke about the application of the antibiotic seed antibiotics in fighting several kinds of diseases of potato and cassava. In fighting several kinds of epiphytic bacteria in fighting several

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CIA-RDP86-00513R000619410012-7"

IZRAIL'SKIY, V.P., prof., doktor biolog.nauk; SHUSTOVA, L.N., kand.med.nauk; GOHLENKO, M.V., doktor biolog.nauk; MURAV'YEV, V.P.; BERENZOVA, Ye.F., doktor biolog.nauk; SUDAKOVA, L.V., mikrobiolog; GRUSHEVOY, S.Ye., doktor sel'skokhoz.nauk; NEMOLYENKO, F.Ye., doktor biolog.nauk; BEL'TIUKOVA, K.I., doktor biolog.nauk; STAROGINA, L.P., kand.biolog.nauk; PERSHINA, Z.G., kand.biolog.nauk; ART'YEM'IEVA, Z.S., mikrobiolog; NOVIKOVA, N.S., kand.biolog.nauk; OSNITSKAYA, Ye.A., fitopatolog; YASHNOVA, N.V., fitopatolog-mikrobiolog; MIKZABEK'YAN, R.O., kand.biolog.nauk; TETYUREVA, I.V., red.; PLEVZHEV, V.I., tekhn.red.

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(Bacteria, Phytopathogenic) (Plant diseases)

BEREZOVA, Ye.F.; IZRAIL'SKIY, V.P.; IMSHENETSKIY, A.A.; KRASIL'NIKOV, N.A.;  
MISHUSTIN, Ye.N.; NAUMOVA, A.N.; RAUTENSHTEYN, Ya.I.

E.V. Runov; obituary. Mikrobiologiya 29 no.6:945-946 N-D '60.  
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(RUNOV, EFIM VASILIEVICH, 1901-1960)

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1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledova-  
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(PETROSIAN, A.P.)

IZRAIL'SKIY, V.P.

Determining the species in phytopathogenic bacteria by the serological method and the geneology of some bacteria. Mikrobiologiya 31 no.6:1018-1022 N-D '62. (MIRA 16:3)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii.  
(BACTERIA, PHYTOPATHOGENIC) (SERUM DIAGNOSIS)

IZRAIL'SKIY, V.P., prof.

Bacterial blight of fruit trees. Zashch. rast. ot vred. i bol.  
8 no.1:50-51 Ja '63. (MIRA 16:5)  
(Fruit—Diseases and pests) (Bacteria, Phytopathogenic)

Name: IZRAIL'SON, Rashel' Moiseyevna

Dissertation: Non-ovulatory (extrogenous) uterine hemorrhages

Degree: Doc Med Sci

Affiliation: not indicated

Defense Date, Place: 23 Nov 54, Council of Central Inst for Advanced Training of Physicians

Certification Date: 26 May 56

Source: BMVO 4/57

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USSR/Microbiology - Antibiosis and Symbiosis, Antibiotics.

F-2

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14739

Author : Fomichev, Yu.K., Izraitel', N.A.  
Inst : -

Title : Experimental Effect of Levomycetin on Scleroma Bacillus.

Orig Pub : Zdravookhr. Belorussii, 1956, No 9, 43-46

Abstract : It was established by serial dilutions of levomycetin (I) in beef-peptone broth that the bacteriostatic titer for Frish-Volkovich scleroma bacillus is 0.39-12.5  $\gamma$ /ml, and the bactericidal one 3.12-50  $\gamma$ /ml. The tests were conducted in vivo on 40 mice weighing 16-18 g, to whom I was given perorally in doses of 1.5 or 15 mg, together with an intraperitoneal infection with a knowingly lethal dose of scleroma bacilli (500 million microbial bodies). In the last two doses I protected all the animals from death. I also proved effective in regard to a streptomycin-resistant variant of scleroma bacillus in experiments in vitro as well as in treating mice infected by this strain.

Card 1/1

USSR/Virology. Bacteria Viruses (Phages)

E

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57328

Author : Izraitel' N. A.

Inst : Not given

Title : Problems of Obtaining the Scleroma Bacteriophage and its Application in Experimental "therapy"

Orig Pub : V sb.: Probl. sklerom. Infektsii. Minsk, Gosizdat. BSSR, 1957, 67-70

Abstract : The phage w-s isolated from 5 to 7 week old agar and bullion cultures of the scleroma bacillus. The phage had a titer of  $10^7$ , was highly specific and lysed 77 out of 80 museum strains. Secondary phage resistant cultures proved to be typical for the noncapsular variant of the scleroma bacillus. Upon the intraperitoneal administration of the phage to white

Card 1/2

#### ANTIBIOTICS

"On the Reliability of the Paper Disk Method", by Yu.K. Fomichev and N.A. Izraitel', Chair of Microbiology (Head - B. Ya. El'bert) of the Minsk Medical Institute, Antibiotiki, No 2, March-April 1957, pp 53-54.

In view of the controversial opinions on the subject, the authors undertook to investigate the reliability of the paper disk test.

The experiments were performed with 40 strains of the Bacillus Frisch-Volkovich\* and with 4 antibiotics: chlortetracycline, streptomycin, levomycetin\*, and penicillin. As a control, the serial method was also used.

In the light of the results obtained, the authors conclude that the paper disk method may be used only for the rough determination of the sensitivity of the Bacillus Frisch-Volkovich to the above-mentioned antibiotics.

KRASIL'NIKOV, A.P.; IZRAITEL', N.A.

Experimental anthrax in irradiated animals. Med.rad. 4  
no.6:56-61 Je '59. (MIREA 12:8)

1. Iz kafedry mikrobiologii (zav. - prof.B.Ya.Mil'bert) Minskogo  
meditsinskogo instituta.  
(ROENTGEN RAYS, eff.  
on exper. anthrax (Rus))  
(ANTHRAX, exper.  
eff. of x-rays (Rus))

KRASIL'NIKOV, A.P.; IZRAYTEL', N.A.

Effectiveness of antibiotic therapy and the prevention of experimental anthrax infection developing on the background of acute radiation sickness. Med. rad. 5 no.9:90 S '60. (MIRA 13:12)  
(RADIATION SICKNESS) (ANTHRAX)  
(ANTIBIOTICS)

IZRAITEL', N.A.; DAVYDOV, O.V.; KRASIL'NIKOV, A.P.

Role of farm animals in the infection of human beings with scleroma.  
Zdrav. Belor. 6 no.4:26-30 Ap '60. (MIRA 14:5)

1. Iz kafedry mikrobiologii (zaveduyushchiy - professor B.Ya.El'bert)  
Minskogo meditsinskogo instituta.  
(RHINOSCLEROMA) (ANIMALS AS CARRIERS OF DISEASE)

EL'BERT, B.Ya.; KRASIL'NIKOV, A.P.; IZRAITEL', N.A.; DAVIDOVA, O.V.;  
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Investigation of the fishes of the Pripet River Basin as bearers  
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1. Kafedra mikrobiologii (zav. - prof. B.Ya. El'bert) Minskogo  
meditsinskogo instituta.

(RHINOSCLEROMA) (PRIPET RIVER BASIN...FISHES)  
(FISH AS CARRIERS OF DISEASE)

IZRAITEL', N.A., kand.med.nauk; KRASIL'NIKOV, A.P., kand.med.nauk

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(ANTIBIOTICS) (RHINOSCLEROMA)

IZRAITEL', I.L.A.; KRASIL'NIKOV, A.P.; FAYNSSTEYN, B.A.; DAVYDOV, O.V.;  
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Krasil'nikov) Minskogo meditsinskogo instituta.

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ZAYTSEV, A.P., red.; BORZOV, K.V., red.; BOGUSLAVSKIY, Yu.K., red.;  
BELOUSOV, V.G., red.; VODAKHOV, L.A., red.; IZRAITEL', S.A., red.;  
KOL', A.N., red.; LISTYUK, S.t., red.; MOISSEYEV, S.L., red.;  
MEL'NIKOV, N.V., red.; MOROZOV, V.P., red.; MUDROV, P.A., red.;  
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